

Sewage sludge generation in Spain: Amounts, geographical distribution and present disposal

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Within the framework of an European programme a study is being carried out about gasification of sewage sludge for combined heat and power applications. As a part of this, we are reviewing the characteristics and quantities of this biomass resource.

A survey has been made and distributed between institutions and companies involved in waste water management requesting information about:

- % Population connected to sewage sludge treatment works (STW)
- Number of STW and its size in population equivalent
- Quantity and composition of sludge produced
- Sewage sludge treatment
- Sewage sludge disposal

Based on this information we are making a map including the quantities of sludge generated, its distribution and actual disposal. We want to assess, as well, the prediction for next years. Furthermore, when there is available information, sewage sludge composition will be shown.

The population of Spain is about 39 million and the population equivalent amounts to 85 million, around 45% of which in accordance with Council Directive 91/271/EEC (European) concerning urban waste water treatment. Most recent data of sludge produced from sewage treatment plants was about 690000 ton/year in terms of dry solids. The regions of Catalonia, Madrid and Andalusia sum up more than half of the total production. Most of the sludge is currently used in agricultural uses and landfill. Reduction of the sludge volume to be disposed is a matter of primary concern.

In this work a map of current sewage sludge generation and management in Spain will be shown.

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